

REMARKS

In response to the Office Action mailed 29 June 2005, Applicant has cancelled Claims 1 – 16, and added new Claims 17 – 30. Claims 17 – 30 are currently pending in the application.

Applicant's copy of the filed application shows sixteen claims originally submitted. The Office Action addresses only claims 1 - 13. Applicant hereby cancels claims 14 - 16, along with claims 1 - 13, so the fact that the original Office Action addressed only claims 1 -13 should not be an issue with relation to this Response. Replacement and cancellation of all originally filed claims renders moot the rejections under section 112.

Claims 1 - 6 were rejected under section 102 as anticipated by Johnson. Claims 8 - 12 were rejected under 102 over Johnson in view of Osborn and Tumminia. Because these claims have been replaced with new claims that more clearly specify and point out applicant's invention, such rejection will be traversed with respect to the new claims.

Newly submitted independent claim 17 provides for a device for cutting and sealing a film web which has a cylindrical roller, and an arcuate sealing/cutting element. The arcuate sealing/cutting element is heated, lies in a plane perpendicular to the axis of the roller, and has at least two different radii that project beyond the roller's surface.

With such a device, the web is both sealed and cut by a single element that remains fixed while the web is pulled across it. The different radii provide for a region that preheats and heats the web to seal it, followed by a higher region

that assists in splitting the web. Because the arcuate element is relatively long, the web is sealed and cut relatively slowly. As described in the specification, this allows the sealing/cutting element to be heated to a lower temperature than that provided by prior art systems.

The Johnson patent includes a heating region to seal the film web, followed by a separate knife edge to cut the web. The heating region is provided by blowing very hot air onto the web, and the cutting region is a heated knife edge separated from the sealing region, and oriented as a vertical blade perpendicular to the plane of the web.


The Osborne patent shows a single, short heating wire that both seals and cuts the web. As described in the specification, this must be performed at an extremely high temperature, which causes the web to bead up along the cauterized edge. The Tumminia reference shows the use of a hot wire element that can be vertically moved within a roller to perform a cut. The Tumminia reference shows a hot wire element that is longitudinally arranged, parallel to the axis of the roller, rather than being circumferentially arranged as provided in the present claims. The hot wire heating element of Tumminia only briefly touches a single section of the web in order to cut it in a transverse direction, not in the direction of web movement. Because the wire must be very hot to do this, the beading problem found with Osborne is also encountered with Tumminia.

No combination of any of the references of record suggest a single sealing/cutting element that is circumferentially oriented and projecting, in a fixed relationship, through a circumferential opening of a moving roller carrying the film

web. As described in the specification, the invention set forth in the claims provides a superior seal and cut over the prior art systems described in the various cited references.

For the reasons set forth above, applicant believes that the device now set forth in the claims defines patentable subject matter over the references of record, and respectfully requests consideration and allowance of the newly submitted claims.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'K. Hill', written over a horizontal line.

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